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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,788	01/11/2005	Stephen Roland Day	021500-134	2434
21839 7590 05/04/2007 BUCHANAN, INGERSOLL & ROONEY PC POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404			EXAMINER RALIS, STEPHEN J	
			ART UNIT 3742	PAPER NUMBER
			MAIL DATE 05/04/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication:

**Office Action Summary**

Application No.

10/520,788

Applicant(s)

DAY, STEPHEN ROLAND

Examiner

Stephen J. Ralis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1, 2, 9-11, 13, 14, 16, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baldridge (U.S. Patent No. 3,317,906) in view of Naruke et al. (U.S. Patent No. 5,193,895).

Baldridge discloses a laminated glazing panel and process for the production thereof comprising two glass plies, a plastic ply and one or more lights which are laminated between the glass plies (column 2, lines 16-39, column 3, lines 7-51; see Figure 1).

The claims differ from Baldridge in calling for the lights to be light emitting diodes and light emitting diodes being mounted on a circuit board.

However, indicator light emitting diodes mounted on circuit boards, as described by Naruke et al., is known in the art. Naruke et al. teach a light body comprising light emitting elements (5) mounted on a circuit board (6; a circuit board inherently has a substrate and a conductive layer) residing in a body of synthetic resin (synthetic resin predominantly being of the plastics family) to provide (1) a reduction in the power consumption of traditional lamp elements, thereby increasing the prolonged life of a power source (column 5, lines 44-47); and to provide (2) the advantage that a lighting system may conform to the shape and size of the fitting face of the desired surface, thereby reducing the overall cost of manufacturing (column 5, lines 51-59). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Baldridge with the light emitting diodes mounted on circuit boards of Naruke et al. to provide (1) a reduction in the power consumption of traditional lamp elements, thereby increasing the prolonged life of a power source (column 5, lines 44-47); and (2) the advantage that a lighting system may conform to the shape and size of the fitting face of the desired surface, thereby reducing the overall cost of manufacturing.

With respect to the limitations of claim 2 and the circuit board being *flexible*, Naruke et al. teach the a plurality of chip-type light emitting elements being mounted on a *flexible* printed circuit board (Abstract).

With respect to the limitations of claims 9-11 and 16, Baldridge further disclose indicia on at least one ply (column 3, lines 41-60); a cut-out in the plastic ply to aid successful lamination of larger components in the glazing panel (26; column 3, lines 27-

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29); multiple plastic plies may be used to laminate the one or more light indicators in the glazing panel (column 3, lines 29-30).

With further respect to the limitations of claim 16 and a cut-out area being prepared in the plastic ply to receive a circuit board..., positioning the circuit board in the cut out area, in the plastic ply to aid successful lamination of larger components in the glazing panel, Baldridge discloses a cut-out in the plastic ply to aid successful lamination of larger components in the glazing panel (26; column 3, lines 27-29). Since Baldridge discloses the incorporation of a larger component into the plastic ply of a laminated glazing panel by provided a cut-out area for the larger component in the plastic ply, to provide a cut-out area being prepared in the plastic ply to receive a circuit board..., positioning the circuit board in the cut out area would have been a mere engineering expediency as Baldridge clearly teaches the use cut-out in the plastic ply to aid successful lamination of larger components in the glazing panel.

With respect to the limitation of claim 13, the Baldridge-Naruke laminating glazing panel combination discloses all of the limitations, as described in claim 1 of above, except for the plastic ply having a thickness before lamination of 2 mm or less. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to make the plastic ply having a thickness before lamination of 2 mm or less, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art.

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With respect to the limitation of claim 14, the Baldrige-Naruke laminating glazing panel combination discloses all of the limitations, as described in claim 1 of above, except for the thickness of the panel being 8 mm or less. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to make the thickness of the panel being 8 mm or less, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art.

With respect to claim 18, the Baldrige-Naruke process for the production of a laminated glazing panel combination discloses all of the limitations, as described in claim 15 of above, except for the overall thickness of the coated circuit board on which one or more light emitting elements are mounted being comparable with the thickness of the plastic ply in which it is positioned. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to make the overall thickness of the coated circuit board on which one or more light emitting elements are mounted being comparable with the thickness of the plastic ply in which it is positioned, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

4. Claims 3-5, 7 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baldrige (U.S. Patent No. 3,317,906) in view of Naruke et al. (U.S. Patent No. 5,193,895) as applied to claim 2 above, and further in view of Fraivillig (U.S. Patent No. 6,208,031).

The Baldrige-Naruke laminating glazing panel combination discloses all of the limitations, as described in claim 2 of above, except for the substrate comprising polyimide; the substrate comprising polyester; and the conductive layer being a metal foil which is adhered to the substrate; the flexible circuit board further comprising a rigid layer.

Howe ver, flexible circuit boards having a substrate comprising polyimide or polyester, a conductive layer being a metal foil which is adhered to the substrate, and a rigid layer, as described by Fraivillig, is known in the art. Fraivillig teaches a flexible circuit board comprising a conductive foil layer that is adhered to a flexible base film that is typically a polyimide or polyester film (column 1, lines 26-31; column 3, lines 6-10; column 4, lines 22-31) to provide a flexible circuit that is not limited by the typical thickness of traditional dielectric films (column 2, lines 1-4), thereby producing a thinner more desirable a flexible circuit board. Fraivillig further teaches that the flexible circuit board may comprise a rigid layer (the addition of a thermoset would inherently create a harder/rigid layer; column 4, lines 27-31). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the Baldrige-Naruke laminating glazing panel combination with the flexible circuit board substrate and conductive layers of Fraivillig to provide a flexible circuit that is not limited by the typical thickness of traditional dielectric films, thereby producing a thinner, more desirable flexible circuit board.

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5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baldridge (U.S. Patent No. 3,317,906) in view of Naruke et al. (U.S. Patent No. 5,193,895) as applied to claim 2 above, and further in view of Ladd (U.S. Patent No. 2001/0055458).

The Baldridge-Naruke laminating glazing panel combination discloses all of the limitations, as described in claim 2 of above, except for the conductive layer being conductive ink which is in direct contact with the substrate.

However, creating a light emitting display using a conductive ink as the conductive layer, as described by Ladd, is known in the art. Ladd teaches a broad surface (12) of sheet (10) of electrically insulating material having grooves 14 that are filled with a highly electrically conductive ink to provide a display that is uniformly constructed, efficient to manufacture without getting the typical defects, thereby reducing typical scrap costs of manufacturing the display devices. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the Baldridge-Naruke laminating glazing panel combination with conductive ink layer of the Ladd light emitting display device to provide a display that is uniformly constructed, efficient to manufacture without getting the typical defects, thereby reducing typical scrap costs of manufacturing the display devices.

6. Claim 8, 12, 15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baldridge (U.S. Patent No. 3,317,906) in view of Naruke et al. (U.S. Patent No. 5,193,895) as applied to claim 2, 11 and 16 above, and further in view of Leclercq (U.S. Patent No. 4,968,895).



The Baldrige-Naruke laminating glazing panel combination discloses all of the limitations, as described in claim 2, 11 and 16 of above, except for the circuit board extending outwardly beyond an edge of the glazing panel to enable connection of the circuit board to a power supply; and the light indicators to be coated with a compatible material of the plastic ply.

However, flexible circuit board extending outwardly beyond an edge of the glazing panel to enable connection of the circuit board to a power supply and the light indicators to be coated with a compatible material of the plastic ply, as described by Leclercq, is known in the art. Leclercq teaches a diode (1) laminated between to glass plies (6) with a plastic ply (5) between. Leclercq also teaches a flexible circuit board (4) having conductors (3) embedded within a layer of plastic (column 2, lines 58-61; see Figure 1) for connecting to a power supply to provide the conductors with the flexibility needed during installation of the diode device, thereby simplifying the manufacturing process. Leclercq further teaches the diode (1) within the laminated glass being coated with a compatible material of the plastic ply within the laminated glass (column 2, lines 46-49) to provide stiffness adequate to avoid any deformation when it is laminated in the glass, thereby increasing the operational longevity of the device. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the flexible circuit board of the Baldrige-Naruke laminating glazing panel combination with the extension from the glass structure to connect to a power supply of Leclercq to provide the conductors with the flexibility needed during installation of the diode device, thereby simplifying the manufacturing process. It would have further been obvious to

one of ordinary skill in the art at the time of the invention was made to modify the plastic/synthetic resin covering of the light emitting element of Baldridge-Naruke laminating glazing panel combination with the device within the laminated glass being coated with a compatible material of the plastic ply within the laminated glass of Leclercq to provide stiffness adequate to avoid any deformation when it is laminated in the glass, thereby increasing the operational longevity of the device.

With respect to the limitation of claims 12, 15 and 17 and the circuit board and one or more light emitting diodes together being at least partially coated with a material compatible with the material of the plastic ply, Leclercq clearly teaches *a diode* (1) being mounted on a circuit board (4) with the circuit board (4) and diode (1) being placed between two laminated glazing panels (glass sheets 6) with a plastic interlayer inbetween (see Figures 1, 3). A diode is an electric circuit that allow current to flow in one direction. Leclercq teaches a diode on a circuit board that senses light and Naruke et al. teach a diode on a circuit board that emits light. Leclercq clearly teach the device (with a diode) being placed between two glass sheets (6) and plastic interlayer (5) inbetween and laminated together. Leclercq further teaches the diode (1) and the within the laminated glass being partially coated with a compatible material of the plastic ply within the laminated glass (column 2, lines 46-49; see Figure 1). Figure 1 clearly teaches the diode (1) and the circuit being partially coated with a compatible material of the plastic ply. Therefore, the Baldridge-Naruke combination in view of Leclercq would inherently have the light emitting diode and the circuit board partially coated with a compatible plastic ply.

***Response to Arguments***

7. Applicant's arguments filed 02 February 2007 have been fully considered but they are not persuasive.

8. In response to applicant's argument that Naruke et al. is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, the reference is in the field of applicant's endeavor.

Applicant discloses that "Laminated glazing panels find uses in windows, (especially vehicle windows) in doors and in screens (Specification page 1, paragraph 2). While the examiner agrees with that assessment, the examiner however also notes for the record that the recited invention is not just "a laminated glazing panel", but "a laminated glazing panel comprising two glass plies, a plastic ply and one or more light emitting diodes which are laminated between the glass plies, wherein the one or more light emitting diodes are mounted on a circuit board". This combination is essentially a lighting system within a laminated glazing panel. Baldrige discloses a laminated glazing panel for a vehicle with a lighting system laminated within (column 2, lines 16-29; see Figure 1) having connecting means to a power source, etc, via connectors (20), however, is silent to the specific structure of the light. Naruke et al. teach a lighting system for use in a vehicle comprising LEDs mounted on a circuit board. Therefore,

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since both prior art references are with respect to light systems within a vehicle, the prior art references are deemed a analogous art.

9. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, there is some teaching, suggestion, or motivation to do so found in the references themselves.

Baldrige discloses a laminated glazing panel and process for the production thereof comprising two glass plies, a plastic ply and one or more lights which are laminated between the glass plies (column 2, lines 16-39, column 3, lines 7-51; see Figure 1). Baldrige is silent to the type of lights within the laminated glazing panel, however, one of ordinary skill in the art would assume they are conventional small lighting lamps used in vehicular components. Baldrige further disclose a connection to a power source via wires (20). Such a connection would also inherently involve connection to a lighting controller to control the application of the power source to the turn signal light (12a, 12b), oil and generator lights (14, 16) and speeding indicating device (18). Such a lighting controller would inherently be in the dash below the laminated glazing panel taking up space and further limiting the addition of additional components.

Naruke et al. teach a light body comprising light emitting elements (5) mounted on a flexible circuit board (6) (flexible circuit board inherently having a substrate and a conductive layer) residing in a body of synthetic resin (synthetic resin predominantly being of the plastics family). Naruke et al. teach many advantages of such a configuration. The first being the use of chip-type light emitting elements (5) instead of conventional lamps (65) can reduce power consumption, presenting economical advantages (column 5, lines 44-49). Second as applicant has noted (page 7, line 18 – page 8, line 12), Naruke et al. teach the whole space consolidation issue is at hand and utilizing a flexible circuit board (6) provides the ability to mount a single configuration in many different vehicles without significant rework etc. (column 1, lines 35-40; column 5, line).

With respect to the use of chip-type light emitting elements (5) instead of conventional lamps (65) can reduce power consumption, presenting economical advantages (column 5, lines 44-49) having no significance to Baldridge, clearly it is known in the art that any lamp/light, small, medium or large, that is replaced by an LED will consume less power. Therefore, applicant's argument that the size of the lamp/light of Baldridge as compared to the size of lamp/light of Naruke et al. is not persuasive because the industry has recognized that LED lighting has a high efficiency, as measured by its light output per unit power input.

With respect to the flexible circuit board (6) providing the ability to mount a single configuration in many different vehicles without significant rework having no significance to Baldridge, as noted above, the lighting controller of Baldridge would inherently be in

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the dash below the laminated glazing panel taking up space and further limiting the addition of additional components and having no flexibility with respect to shape or size. Naruke et al. clearly teach the flexible circuit board (6) with LEDs (5) being mounted thereon to provide a lighting system that can be made to conform to the shape and size of the fitting face of the desired surface by cutting the flexible circuit board (6) with LEDs (5) attached thereon to a desired length or by deforming it. (column 5, lines 50-59). Clearly, an advantage can be seen to include such flexibility and open-ended design and engineering architecture to the lights of Baldridge to provide a single lighting source that can be used in many different types/sizes of laminated glazing panels, thereby reducing the overall manufacturing costs of the panels.

With respect to applicant's argument to claim 16, Baldridge discloses a cut-out in the plastic ply to aid successful lamination of larger components in the glazing panel (26; column 3, lines 27-29). Since Baldridge discloses the incorporation of a larger component into the plastic ply of a laminated glazing panel by provided a cut-out area for the larger component in the plastic ply, to provide a cut-out area being prepared in the plastic ply to receive a circuit board..., positioning the circuit board in the cut out area would have been a mere engineering expediency as Baldridge clearly teaches the use cut-out in the plastic ply to aid successful lamination of larger components in the glazing panel.

10. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention

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where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, there is some teaching, suggestion, or motivation to do so found in the references themselves.

Leclercq teaches incorporating a photodiode (1) with conductors (3) and terminals (3a) mounted on some type of circuit board (4). The examiner agrees with applicant that Leclercq teaches the photodiode (1) being a silicon strip, however, the examiner notes that Leclercq clearly teaches a diode (1) being mounted on a flexible circuit board (4) with the flexible circuit board (4) and diode (1) being placed between two laminated glazing panels (glass sheets 6) with a plastic interlayer (5) inbetween (see Figures 1, 3). A diode is an electric circuit that allow current to flow in one direction. Leclercq teaches a diode (1) on a flexible circuit (4) that senses light and Naruke et al. teach a diode (5) on a flexible circuit board (6) that emits light. Leclercq clearly teach the device (with a diode) being placed between two glass sheets (6) and plastic interlayer (5) inbetween and laminated together. Leclercq further teaches the diode (1) within the laminated glass being coated with a compatible material of the plastic ply within the laminated glass (column 2, lines 46-49). Such a structure provide stiffness adequate to avoid any deformation when it is laminated in the glass, thereby increasing the operational longevity of the device which is a clear reason to combine Leclercq with the Baldridge-Naruke combination.

Furthermore with respect that Leclercq alone does not described partially coating both a light emitting diode and a circuit board with a compatible plastic ply, the examiner agrees. However, the examiner notes that the combination of Baldridge and Naruke in view of Leclercq meets this limitation. Leclercq clearly teaches a diode (1) being mounted on a flexible circuit board (4) with the flexible circuit board (4) and diode (1) being placed between two laminated glazing panels (glass sheets 6) with a plastic interlayer (5) inbetween (see Figures 1, 3). A diode is an electric circuit that allow current to flow in one direction. Leclercq teaches a diode on a flexible that is senses light and Naruke et al. teach a diode on a flexible circuit board that emits light. Leclercq clearly teach the device (with a diode) being placed between two glass sheets (6) and plastic interlayer (5) inbetween and laminated together. Leclercq further teaches the diode (1) and the within the laminated glass being partially coated with a compatible material of the plastic ply within the laminated glass (column 2, lines 46-49; see Figure 1). Figure 1 clearly teaches the diode (1) and the circuit being partially coated with a compatible material of the plastic ply. Therefore, the Baldridge-Naruke combination in view of Leclercq would inherently have the light emitting diode and the circuit board partially coated with a compatible plastic ply.

11. With respect to applicant's argument that modifying the already flexible characteristics of the Baldridge in view of Naruke with the rigid layer of Fraivillig is improper, the examiner disagrees. Fraivillig teaches applying such a rigid layer does not remove the flexibility of the circuit, however, allows the construction of the flexible circuit to be thinner while retaining the flexibility of the circuit (column 2, lines 1-4). Therefore,



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the rejection in view of Fraivillig is deemed proper as to not destroying the prior art references in light of its teachings.

***Conclusion***

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen J. Ralis whose telephone number is 571-272-6227. The examiner can normally be reached on Monday - Friday, 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Philip Leung can be reached on 571-272-4782. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

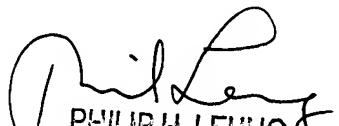
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Stephen J Ralis  
Examiner  
Art Unit 3742

SJR  
April 27, 2007



PHILIP H. LEUNG  
Acting S. Principal Examiner  
ART UNIT 3742